

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,652	09/19/2003	Thomas E. Creamer	BOC9-2003-0026 (395)	8491
	7590 12/21/200 son, Akerman Senterfi	EXAMINER		
Fourth Floor		MANOSKEY, JOSEPH D		
222 Lakeview Avenue P.O. Box 3188			ART UNIT	PAPER NUMBER
West Palm Bea	ch, FL 33402-3188	2113		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	12/21/2006	PAPER .	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/666,652	CREAMER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Joseph D. Manoskey	2113				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 19 Section 1	eptember 2003.					
/-						
• • • • • • • • • • • • • • • • • • • •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 48	J3 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-35 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-35 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 19 September 2003 is/o Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 11.	are: a) accepted or b) object drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	es have been received. Es have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/8/04.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate				

Art Unit: 2113

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 14-34 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claims 14-17, the claim is directed to "A debugger" and all the limitations are software elements of a debugger, thus being a program per se.

Referring to claims 18-21, the claim is directed to "A ghost agent" and all the limitations are software elements of the ghost agent, thus being a program per se.

Referring to claim 22-34, the claim is directed to "a machine-readable storage" and "executable by a machine for causing the machine to". This is considered non-statutory subject matter. The Examiner suggests the Applicant change the limitation to read "A computer-readable storage medium" and "executable by computer for causing the computer to".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 14, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Boukobza, et al., U.S. Patent 6,122,664, hereinafter referred to as "Boukobza".
- 5. Referring to claim 14, Boukobza teaches a management node for a plurality of nodes of a distributed management environment that includes testing conditions and reconfiguring or correcting actions, this is interpreted as a debugger comprising a plurality of hosts, wherein said hosts are software objects for an application domain distributed within different grids of a grid environment (See Col. 1, lines 10-15 and Col. 2, lines 45-52). Boukobza discloses autonomous agents being installed in nodes to be monitored, and the nodes being monitored are objects, this is interpreted as at least one ghost agent configured to be associated with a selected one of said hosts, wherein said ghost agent is further configured to debug said associated host (See Col. 3, lines 12-13 and Col. 4, lines 63-67).

Boukobza teaches an administrator on the management node give commands for monitoring via a configuration file for the monitoring agent which is then activated

Art Unit: 2113

(See Col. 5, line 63 to Col. 6, line 42). Boukobza also teaches displaying the status of an object, this is interpreted as an interface for debugging said application domain, wherein said interface conveys debugging commands to said ghost agents and responsively receives debugging messages (See Col. 6, lines 24-26).

- 6. Referring to claim 16, Boukobza teaches logging the actions taken by each node being monitored for independent analysis by the management node, this is interpreted as a debugging data store configured to record said debugging messages from a plurality of ghost agents (See Col. 6, lines 32-35).
- 7. Referring to claim 17, Boukobza teaches logging the actions taken by each node being monitored for independent analysis by the management node, this is interpreted as a debugger analyzer configured to analyze data within said debugging data store (See Col. 6, lines 32-35).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2113

9. Claims 1-13, 15, and 18-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boukobza in view of Putzolu et al., U.S. Patent 6,681,243, hereinafter referred to as "Putzolu".

10. Referring to claim 1, Boukobza teaches a method of management of a plurality of nodes of a distributed management environment that includes testing conditions and reconfiguring or correcting actions, this is interpreted as a method of debugging software objects within a grid software environment (See Col. 1, lines 10-15 and Col. 2, lines 45-52). Boukobza discloses autonomous agents being installed in nodes to be monitored, and the nodes being monitored are objects, this is interpreted as identifying a host, wherein said is a software object; and associating a ghost agent with said host (See Col. 3, lines 12-13 and Col. 4, lines 63-67). Boukobza teaches logging the actions taken by each node being monitored for independent analysis, this is interpreted as replicating actions executed by said host for use by said ghost agent; and debugging said host based upon said replication actions (See Col. 6, lines 32-35).

Boukobza does not teach moving said ghost agent from one grid within said grid environment to another grid, however Boukobza does teach monitoring multiple nodes and distributing the monitoring (See Col. 2, lines 20-25). Putzolu teaches managing a network and using mobile agents which can move from one device to another in the environment and such agents being applications to diagnose, report or correct network conditions (See Col. 3, lines 46-64 and col. 4, lines 15-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the managing

Art Unit: 2113

and debugging of software objects of Boukobza with the mobile managing objects of Putzolu. This would have been obvious to one of ordinary skill in the art at the time of the invention because it allows for easier and more effective management of a network (See Putzolu, Col. 3, lines 48-54).

- 11. Referring to claim 2, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including moving software agents to another device or environment, wherein agents can be both applications such as word processor and applications to diagnose, report, or correct network conditions, this is interpreted as moving said host form one grid within said grid environment to another grid; and, responsively moving said ghost agent in accordance with movement of said host (See Putzolu, Col. 3, lines 59-64 and Col. 4, lines 15-23).
- 12. Referring to claim 3, Boukobza and Putzolu disclose all the limitations (See rejection of claim 1) including the monitored object being part of a production environment (See Boukobza, Col. 3, lines 12-17). Boukobza also teaches log files of the actions of each node for independent analysis performed by the management node, this is interpreted as said method further comprising the step of preventing said replicated actions from operationally executing in said production environment (See Boukobza, Col. 6, lines 30-35).

Art Unit: 2113

- 13. Referring to claim 4, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including the administrator on the management node give commands for monitoring via a configuration file for the monitoring agent which is then activated, this is interpreted as wherein said debugging step further comprises the steps of: receiving a debugging command and executing said debugging command (See Boukobza, Col. 5, line 63 to Col. 6, line 42). Boukobza also teaches displaying the status of an object, this is interpreted as responsively generating at least one debugging message (See Boukobza, Col. 6, lines 24-26).
- 14. Referring to claim 5, Boukobza and Putzolu disclose all the limitations (See rejection of claim 4) including displaying the status of an object to the administer of the management node, this is interpreted as determining a location that is external to said ghost agent; and conveying said debugging messages to said determined location (See Boukobza, Col. 6, lines 24-28).
- 15. Referring to claim 6, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including each agent comprising modules that measure parameters and collecting the measurements, this is interpreted as debugging step further comprising the steps of: identifying a parameter defined within said host; and determining a value for said parameter using said ghost agent (See Boukobza, Col. 2, lines 30-34).

- 16. Referring to claim 7, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including each agent comprising modules that measure dynamic parameters and collecting the measurements, this is interpreted as debugging step further comprising the steps of: determining said value for said parameter before one of said replicated actions is executed; and, determining a value for said parameter after said replicated action is executed (See Boukobza, Col. 2, lines 30-34).
- 17. Referring to claim 8, Boukobza and Putzolu disclose all the limitations (See rejection of claim 1) including starting and stopping the monitoring process, this is interpreted as determining a processing break point for at least one of said replicated actions; and, halting execution of said replicated action at said processing break point (See Boukobza, Col. 5, lines 9-11).
- 18. Referring to claim 9, Boukobza and Putzolu teach all the limitations (See rejection of claim 8) including each agent comprising modules that measure parameters and collecting the measurements, this is interpreted as debugging step further comprising the step of: determining at least one parameter value occurring at said processing break point (See Boukobza, Col. 2, lines 30-34).
- 19. Referring to claim 10, Boukobza and Putzolu disclose all the limitations (See rejection of claim 1) including starting and stopping the monitoring process, this is interpreted as stepping the executing of at least a portion of said replicated actions (See

Boukobza, Col. 5, lines 9-11). Boukobza discloses each agent comprising modules that measure parameters and collecting the measurements, this is interpreted as for each execution step, determining at least one parameter value (See Boukobza, Col. 2, lines 30-34).

- 20. Referring to claim 11, Boukobza and Putzolu teaches all the limitations (See rejection of claim 1) including the autonomous agents installed on multiple nodes to be monitored, this is interpreted as selecting a plurality of hosts; and, for each selected host, repeating said associating step, said replicating step, and said debugging step (See Boukobza, Col. 4, lines 63-67).
- 21. Referring to claim 12, Boukobza and Putzolu disclose all the limitations (See rejection of claim 11) including monitoring applications in all the nodes, this is interpreted as wherein selected hosts, are utilized within an application domain, said method further comprising the step of debugging said application domain (See Boukobza, Col. 2, lines 39-46).
- 22. Referring to claim 13, Boukobza and Putzolu teaches all the limitations (See rejection of claim 12) including the process being portable to different platforms and being independent of the its operating system, this is interpreted as wherein said hosts are disposed within different grids of said grid environment, said method further comprising steps of: providing an interface for debugging said application domain,

wherein said interface is configured to debug said hosts regardless of which grid said hosts are disposed within (See Boukobza, Col. 3, lines 51-53).

Page 10

23. Referring to claim 15, Boukobza teaches all the limitations (See rejection of claim 14) except Boukobza does not teach wherein at least a portion of said hosts move from one grid within said grid environment to another grid, and wherein said ghost agents responsively move from grid to grid in accordance with movement of said associated host, however Boukobza does teach monitoring multiple nodes and distributing the monitoring (See Col. 2, lines 20-25). Putzolu teaches moving software agents to another device or environment, wherein agents can be both applications such as word processor and applications to diagnose, report, or correct network conditions (See Putzolu, Col. 3, lines 59-64 and Col. 4, lines 15-23).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the managing and debugging of software objects of Boukobza with the mobile managing objects of Putzolu. This would have been obvious to one of ordinary skill in the art at the time of the invention because it allows for easier and more effective management of a network (See Putzolu, Col. 3, lines 48-54).

24. Referring to claim 18, Boukobza discloses autonomous agents being installed in nodes to be monitored, this is interpreted as A ghost agent (See Col. 3, lines 12-13 and Col. 4, lines 63-67). Boukobza teaches a management node for a plurality of nodes of a distributed management environment that includes testing conditions and reconfiguring

or correcting actions, this is interpreted as a ghost controller for managing interactions between said ghost agent and a grid environment (See Col. 1, lines 10-15 and Col. 2, lines 45-52). Boukobza discloses autonomous agents being installed in nodes to be monitored, and the nodes being monitored are objects and Boukobza teaches logging the actions taken by each node being monitored for independent analysis, this is interpreted as means for debugging said host using said ghost agent; and a ghost log configured to record debugging messages (See Col. 3, lines 12-13, Col. 4, lines 63-67, and Col. 6, lines 32-35).

Boukobza does not teach wherein said ghost agent automatically moves from grid to grid within grid environment to follow movements of a host, however Boukobza does teach monitoring multiple nodes and distributing the monitoring (See Col. 2, lines 20-25). Putzolu teaches moving software agents to another device or environment, wherein agents can be both applications such as word processor and applications to diagnose, report, or correct network conditions (See Putzolu, Col. 3, lines 59-64 and Col. 4, lines 15-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the managing and debugging of software objects of Boukobza with the mobile managing objects of Putzolu. This would have been obvious to one of ordinary skill in the art at the time of the invention because it allows for easier and more effective management of a network (See Putzolu, Col. 3, lines 48-54).

25. Referring to claim 19, Boukobza and Putzolu teach all the limitations (See rejection of claim 18) including an administrator on the management node give

commands for monitoring via a configuration file for the monitoring agent which is then activated (See Boukobza, Col. 5, line 63 to Col. 6, line 42). Boukobza also teaches displaying the status of an object, this is interpreted as an interface for associating said ghost agent with said host (See Boukobza, Col. 6, lines 24-26).

- 26. Referring to claim 20, Boukobza and Putzolu disclose all the limitations (See rejection of claim 18) including the autonomous agents installed in nodes to be monitored, thus being associated with the specific hosts, this is interpreted as further comprising a ghost identifier configured to identify said ghost agent to components within said grid environment (See Boukobza, Col. 4, lines 63-67).
- 27. Referring to claim 21, Boukobza and Putzolu teach all the limitations (See rejection of claim 18) including managing a network and using mobile agents which can move from one device to another in the environment and such agents being applications to diagnose, report or correct network conditions, this is interpreted as means for disassociating said ghost agent from said host; and, means for associating said ghost agent with a different host (See Putzolu, Col. 3, lines 46-64 and col. 4, lines 15-23).
- 28. Referring to claim 22, Boukobza teaches a method, which is implemented on a various nodes of distributed system, of management of a plurality of nodes of a distributed management environment that includes testing conditions and reconfiguring

Art Unit: 2113

or correcting actions, this is interpreted as a machine-readable storage having stored thereon, a computer program having a plurality of code sections, said code sections executable by a machine for causing the machine to performs steps (See Col. 1, lines 10-15 and Col. 2, lines 45-52). Boukobza discloses autonomous agents being installed in nodes to be monitored, and the nodes being monitored are objects, this is interpreted as identifying a host, wherein said is a software object; and associating a ghost agent with said host (See Col. 3, lines 12-13 and Col. 4, lines 63-67). Boukobza teaches logging the actions taken by each node being monitored for independent analysis, this is interpreted as replicating actions executed by said host for use by said ghost agent; and debugging said host based upon said replication actions (See Col. 6, lines 32-35).

Boukobza does not teach moving said ghost agent from one grid within said grid environment to another grid, however Boukobza does teach monitoring multiple nodes and distributing the monitoring (See Col. 2, lines 20-25). Putzolu teaches managing a network and using mobile agents which can move from one device to another in the environment and such agents being applications to diagnose, report or correct network conditions (See Col. 3, lines 46-64 and col. 4, lines 15-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the managing and debugging of software objects of Boukobza with the mobile managing objects of Putzolu. This would have been obvious to one of ordinary skill in the art at the time of the invention because it allows for easier and more effective management of a network (See Putzolu, Col. 3, lines 48-54).

29. Referring to claim 23, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including moving software agents to another device or environment, wherein agents can be both applications such as word processor and applications to diagnose, report, or correct network conditions, this is interpreted as moving said host form one grid within said grid environment to another grid; and, responsively moving said ghost agent in accordance with movement of said host (See Putzolu, Col. 3, lines 59-64 and Col. 4, lines 15-23).

Page 14

- Referring to claim 24, Boukobza and Putzolu disclose all the limitations (See 30. rejection of claim 1) including the monitored object being part of a production environment (See Boukobza, Col. 3, lines 12-17). Boukobza also teaches log files of the actions of each node for independent analysis performed by the management node, this is interpreted as wherein said actions executed by said host are executed within a production environment, said method further comprising the step of preventing said replicated actions from operationally executing in said production environment (See Boukobza, Col. 6, lines 30-35).
- Referring to claim 25, Boukobza and Putzolu teach all the limitations (See 31. rejection of claim 1) including the administrator on the management node give commands for monitoring via a configuration file for the monitoring agent which is then activated, this is interpreted as wherein said debugging step further comprises the steps of: receiving a debugging command and executing said debugging command (See

Art Unit: 2113

Boukobza, Col. 5, line 63 to Col. 6, line 42). Boukobza also teaches displaying the status of an object, this is interpreted as responsively generating at least one debugging message (See Boukobza, Col. 6, lines 24-26).

- 32. Referring to claim 26, Boukobza and Putzolu disclose all the limitations (See rejection of claim 4) including displaying the status of an object to the administer of the management node, this is interpreted as determining a location that is external to said ghost agent; and conveying said debugging messages to said determined location (See Boukobza, Col. 6, lines 24-28).
- 33. Referring to claim 27, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including each agent comprising modules that measure parameters and collecting the measurements, this is interpreted as debugging step further comprising the steps of: identifying a parameter defined within said host; and determining a value for said parameter using said ghost agent (See Boukobza, Col. 2, lines 30-34).
- 34. Referring to claim 28, Boukobza and Putzolu teach all the limitations (See rejection of claim 1) including each agent comprising modules that measure dynamic parameters and collecting the measurements, this is interpreted as debugging step further comprising the steps of: determining said value for said parameter before one of

Art Unit: 2113

said replicated actions is executed; and, determining a value for said parameter after said replicated action is executed (See Boukobza, Col. 2, lines 30-34).

- 35. Referring to claim 29, Boukobza and Putzolu disclose all the limitations (See rejection of claim 1) including starting and stopping the monitoring process, this is interpreted as determining a processing break point for at least one of said replicated actions; and, halting execution of said replicated action at said processing break point (See Boukobza, Col. 5, lines 9-11).
- 36. Referring to claim 30, Boukobza and Putzolu teach all the limitations (See rejection of claim 8) including each agent comprising modules that measure parameters and collecting the measurements, this is interpreted as debugging step further comprising the step of: determining at least one parameter value occurring at said processing break point (See Boukobza, Col. 2, lines 30-34).
- 37. Referring to claim 31, Boukobza and Putzolu disclose all the limitations (See rejection of claim 1) including starting and stopping the monitoring process, this is interpreted as stepping the executing of at least a portion of said replicated actions (See Boukobza, Col. 5, lines 9-11). Boukobza discloses each agent comprising modules that measure parameters and collecting the measurements, this is interpreted as for each execution step, determining at least one parameter value (See Boukobza, Col. 2, lines 30-34).

Art Unit: 2113

- 38. Referring to claim 32, Boukobza and Putzolu teaches all the limitations (See rejection of claim 1) including the autonomous agents installed on multiple nodes to be monitored, this is interpreted as selecting a plurality of hosts; and, for each selected host, repeating said associating step, said replicating step, and said debugging step (See Boukobza, Col. 4, lines 63-67).
- Referring to claim 33, Boukobza and Putzolu disclose all the limitations (See rejection of claim 11) including monitoring applications in all the nodes, this is interpreted as wherein selected hosts, are utilized within an application domain, said method further comprising the step of debugging said application domain (See Boukobza, Col. 2, lines 39-46).
- 40. Referring to claim 34, Boukobza and Putzolu teaches all the limitations (See rejection of claim 12) including the process being portable to different platforms and being independent of the its operating system, this is interpreted as wherein said hosts are disposed within different grids of said grid environment, said method further comprising steps of: providing an interface for debugging said application domain, wherein said interface is configured to debug said hosts regardless of which grid said hosts are disposed within (See Boukobza, Col. 3, lines 51-53).

Art Unit: 2113

41. Referring to claim 35, Boukobza teaches a management system of a plurality of nodes of a distributed management environment that includes testing conditions and reconfiguring or correcting actions, this is interpreted as a system for debugging software objects within a grid software environment (See Col. 1, lines 10-15 and Col. 2, lines 45-52). Boukobza discloses autonomous agents being installed in nodes to be monitored, and the nodes being monitored are objects, this is interpreted as means for identifying a host, wherein said is a software object; and means for associating a ghost agent with said host (See Col. 3, lines 12-13 and Col. 4, lines 63-67). Boukobza teaches logging the actions taken by each node being monitored for independent analysis, this is interpreted as means for replicating actions executed by said host for use by said ghost agent; and means for debugging said host based upon said replication actions (See Col. 6, lines 32-35).

Boukobza does not teach means for moving said ghost agent from one grid within said grid environment to another grid, however Boukobza does teach monitoring multiple nodes and distributing the monitoring (See Col. 2, lines 20-25). Putzolu teaches managing a network and using mobile agents which can move from one device to another in the environment and such agents being applications to diagnose, report or correct network conditions (See Col. 3, lines 46-64 and col. 4, lines 15-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the managing and debugging of software objects of Boukobza with the mobile managing objects of Putzolu. This would have been obvious to one of ordinary skill in

Art Unit: 2113

the art at the time of the invention because it allows for easier and more effective management of a network (See Putzolu, Col. 3, lines 48-54).

Conclusion

- 42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are closely related systems.
 - U.S. Patent 6,959,432 to Crocker
 - U.S. Patent 6,968,540 to Beck et al.
 - U.S. Patent 6,981,180 to Bailey et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Manoskey whose telephone number is (571) 272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2113

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 17, 2006

Row H. Sewool A.